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**Blood substitute with oxygen transport properties - produced by coupling  
of a polysaccharide e.g. dextran with cell-free haemoglobin**

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Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 3029307	A	19820304	DE 3029307	A	19800801	198210 B
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Priority Applications (No Type Date): DE 3029307 A 19800801

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3029307	A		25		

Abstract (Basic): DE 3029307 A

Haemoglobin-contg. blood substitutes of the formula M-R1-B-R2-Hb  
(I) in which the cell-free haemoglobin Hb is linked via reactive groups  
R1 and R2 and a bridging ligand B with a polysaccharide M are new. In  
the formula, B is an opt. mono- or polysubstd. 3-14C aliphatic group,  
or a cycloalkyl or aryl group with up to 14C atoms; and R1 and R2 are  
-O-, -NH-, :N-, -S-, -S(CH2)-, :N-(CH2)m-NH-, -NH-(CH2)m-NH-,  
:N-(CH2)m-N:, or a carboxy or hydrazide group, m is 1 to 14).

Since the blood substitute has oxygen-transporting properties, it  
can be used in cases of haemorrhagic shock where the extent of blood  
loss is such that erythrocyte-free transfusions cannot be used safely.  
The new product has a long half-life in the body, and has  
oxygen-transport properties approximating those of natural haemoglobin.

Title Terms: BLOOD; SUBSTITUTE; OXYGEN; TRANSPORT; PROPERTIES; PRODUCE;  
COUPLE; POLYSACCHARIDE; DEXTRAN; CELL; FREE; HAEMOGLOBIN

Derwent Class: B04

International Patent Class (Additional): A61K-031/71; A61K-037/14

File Segment: CPI

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